

**ATTORNEY DOCKET NO.**  
**13647.0004**

**PATENT**  
**Customer ID No. 33649**

**REMARKS/ARGUMENTS**

Claims 9-28 are pending. In an Office Action dated 11/03/2004, Claims 9-11 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Nair et al. (US Pat. No. 5,448,047), Claims 12-16 and 18-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nair et al, in view of Kramer et al (US Pat. No. 6,163,772).

These rejections are respectfully traversed.

**Rejections under 35 USC 102(b)**

Claims 9-11 and 17 stand rejected under 35 U.S.C. 102(b) as being anticipated by Nair. In particular, it is asserted that Nair discloses a protocol translator receiving the credit transaction data from two or more point of sale systems according to two or more different transmission protocols and an encryption system coupled to the protocol translator. This rejection is respectfully traversed.

Applicants note for the record that this is the fourth non-final office action, and the third piece of prior art that has been used to reject these claims. In the first office action, mailed 1/3/2003, Kramer, 6,163,772 was used to reject these claims under 35 U.S.C 102. Although the rejection was upheld and made final after being traversed, the finding of finality was withdrawn following a telephone interview in which the prior Examiner's supervisor was forced to acknowledge that the cited art did not support the rejection. In the next office action, mailed 3/25/2004, claims 9-11 and 17 were rejected under 35 U.S.C. 102 as being anticipated by Koll, 6,601,040. Now, after two years of delay, yet another piece of prior art is used to reject the claims, and again, it is one that clearly lacks each claim element. The Applicants are aware that this application has been assigned to a so-called "business method" art unit, and object to the arbitrary and capricious denial of patent protection for such inventions. In particular, the Applicants call the Examiner's attention to <http://www.uspto.gov/web/menu/pbmethod/applicationfiling.htm>, which quantifies the PTO's disparate and arbitrary treatment. While discriminating against so-called "business method" patents might help to silence a small but vocal minority of critics who are opposed to the patenting of any software, this unfair treatment denigrates the professionalism and respectability

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of the U.S. Patent Office, and reflects poorly on those competent and impartial examiners who work in areas that have not been arbitrarily branded as "business methods."

Turning to the substantive issues presented in the latest office action, the Examiner states that Nair discloses at col. 4 line 13 to col. 5 line 2 and at col. 11 lines 27-47 two or more point of sale systems, transmitting data to a protocol translator according to two or more different transmission protocols. Reference to Nair, Figure 2C, and to the cited sections, clearly reveals a system that uses only a single POS terminal 140. Surely, the Examiner is not construing "point of sale system" to cover items that are explicitly identified in Nair as being something other than a point of sale system, such as electronic cash register 65, signature capture pad 95, or PIN pad 110? It is unreasonable to construe a term to encompass the prior art where the prior art itself does not use the term in that manner – the only way Nair could disclose two or more point of sale systems would be if the very terminology used by Nair to distinguish between a point of sale system and an electronic cash register, signature capture pad, or PIN pad is read out of the reference, which is not permissible. As Nair identifies only a single POS terminal 140, then it clearly cannot disclose "a protocol translator receiving the credit transaction data from two or more point of sale systems according to two or more different transmission protocol protocols, each transmission protocol associated with a different credit authorization system." Presumably, the Examiner is construing a protocol translator to cover multi-reader terminal 10, but the disclosure at col. 10, lines 23-27 belies this construction – "Using the serial ports 62 for data communications, the preferred multi-reader terminal 10 provides check and credit card reading capabilities that may be used in conjunction with a merchant's existing point-of-sale ("POS") system." Not only does this clearly identify that only a single point of sale system is contemplated by Nair, it further shows that multi-reader terminal 10 is at best a protocol switch that can read according to two (and only two) protocols – credit card and check. The multi-reader terminal 10 of Nair is not a "a protocol translator receiving the credit transaction data from two or more point of sale systems according to two or more different transmission protocol protocols, each transmission protocol associated with a different credit authorization system," as is clearly seen by the teachings of Nair.

Likewise, at col. 11, line 63 to col. 12, line 6, Nair states as "described in greater detail below, the serial ports 62 on the multi-reader terminal 10 may be individually configured.

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Therefore, it is possible to pass data from one serial port to another. In addition, the multi-reader terminal 10 may be programmed to monitor data from the ISP 135 and to distinguish data intended for the POS terminal 140 from that intended for the multi-reader terminal 10. The multi-reader terminal 10 responds to data intended for it, and passes other data on to the POS terminal. Likewise, data transmitted from the POS terminal 140 to the ISP 135 is passed through the multi-reader terminal 10 without interference." (Emphasis added). Clearly, neither the multi-reader terminal 10 nor ISP 135 is "a protocol translator receiving the credit transaction data from two or more point of sale systems according to two or more different transmission protocol protocols, each transmission protocol associated with a different credit authorization system, and forming a credit transaction data message." ISP 135 and multi-card reader 10 are nothing more than routers - forwarding on messages according to different transmission protocols, and performing no translation.

The Examiner also asserts that cited sections of Nair disclose encryption of the credit transaction data message, but the root term "encrypt" is only used once in all of Nair, in reference to an encrypted password that must be used to access the point of sale system, which the multi-reader system cannot do. Nair simply fails to disclose any form of encryption of a data message - the cited sections of Nair pertain to reading magnetic stripe regions and embossed regions of a credit card - no encryption is even disclosed at the cited section!

It is further noted that the term "translate," or its cognate terms such as "translator" and "translating," are not even used in Nair - how can Nair disclose a protocol translator when translation is not even discussed?

In regards to claim 10, the Examiner asserts that Nair discloses a "device roister" coupled to the protocol translator, citing to col. 6, line 39 to col. 7, line 29. This section discusses that the multi-reader terminal acts as a router - Applicants call the Examiner's attention particularly to col. 7, lines 7-18. These are clearly the functions of a router, not a protocol translator. Multi-reader terminal 10 cannot be both the protocol translator and the router, if for no other reason than because no protocol translation functions are even disclosed or described in all of Nair.

In regards to claim 11, the Examiner points to col. 7, lines 7-36 and 49-63, and also to Fig. 15, 62, 1010, 1020, 1030, 1035 and 1040 as disclosing a management system storing a protocol module to the protocol system. Applicants note in this regard that the term "protocol

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system" is more accurately characterized as the "protocol translator," and have made that correction, although it appears that the Examiner understood the claim without the change. Nevertheless, Nair discloses no such action. The cited sections of Nair do not even use the term "protocol." Applicants do note that the discussion of Fig. 15 notes that the multi-reader terminal can receive downloads, but again, as the multi-reader terminal is only used for reading and not for transmission protocol translation, even the sections of Nair that were not cited by the Examiner fail to disclose the claimed functionality.

In regards to claim 17, Nair fails to disclose the following emphasized elements: "transmitting one or more control messages to a remote hub, each control message adapted for one of two or more different point of sale devices; processing the control message at the remote hub; and performing a control function on one of two or more point of sale devices that read credit card data from a magnetic stripe of a credit card at the remote hub in response to the control message if the control message is adapted for the point of sale device." As previously discussed, Nair discloses that only multi-reader terminal 10 can receive downloads, and only one type of point of sale device is disclosed by Nair. At best, there are only two devices that can read credit card data from a magnetic stripe of a credit card – multi-reader terminal 10 and point of sale terminal 140 – and multi-reader terminal 10 cannot be both the remote hub and one of the two or more different point of sale devices, if for no other reason than because Nair itself defines a point of sale device as something that is different from a multi-reader terminal. Furthermore, the multi-reader terminal 10 of Nair is not capable of performing a control function on the point of sale device. The only thing that the multi-reader terminal 10 of Nair can do is route – it can download new routing data, but it cannot perform a control function on the only point of sale device disclosed by Nair, much less one of two or more point of sale devices, where the control message is adapted for the point of sale device.

Applicants have, for the third time, diligently and patiently explained how the newly-cited art fails to anticipate the claimed invention. Although it is apparent that the "business method" art units are acting under instructions not to do so except for a small number of cases, Applicants respectfully request the Examiner to withdraw the rejections and allow these claims, and not to continue to cite new art against these claims, or to improperly uphold the rejections and force the Applicants to appeal, or to otherwise engage in the practices that distinguish the

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"business method" art units from other art units at the United States Patent and Trademark Office, which carry out their constitutionally-mandated tasks with professionalism and impartiality.

**Rejections under 35 USC 103(a)**

Claims 12-16 and 18-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nair in view of Kramer. Although the shortcomings of Nair have been exhaustively traversed, Applicants will traverse each of these claims in an effort to further show the Examiner that, again, the cited art fails to disclose each element of the claimed invention.

As an initial point, as previously noted in the response to the first two office actions, in which the pending claims were rejected over Kramer, the previous Examiner's supervisor was forced to admit that Kramer is drawn to *virtual* point of sale processing, and is not related to systems that read credit card data from magnetic stripes. As such, even if the two systems are combined, the resulting system only yields a system for virtual point of sale processing that can also receive data from a system such as Nair – there is no support for interaction between the functions of Kramer, which are all drawn to virtual terminals, and the system of Nair, which only discloses a single POS terminal and fails to disclose any functionality related to transmission protocol translation or performing a control function on one of two or more point of sale devices that read credit card data from a magnetic stripe of a credit card at the remote hub in response to the control message if the control message is adapted for the point of sale device. However, each claim will be independently addressed. Applicants would appreciate a meaningful and detailed response, in light of the effort and time involved to provide such a response.

Claim 12 depends from claim 9 and further comprising a management system interface coupled to the encryption system, the management system interface storing an encryption module to the encryption system. As previously discussed, Nair fails to discuss encryption of anything other than a password that must be used to access the point of sale system, which the multi-reader system cannot do, and Kramer is drawn to a virtual terminal system. In order to combine Nair and Kramer in this manner, it would be necessary to distribute the centralized functionality of Kramer into each of the distributed multi-reader systems of Nair. How does Kramer track which of the distributed multi-reader systems of Nair has received such modules,

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and which require updates? It cannot – it can only interface with virtual point of sale systems, not physical point of sale systems. While the multi-reader terminals of Nair can receive downloads, they cannot interface with the gateway terminal of Kramer in the manner that the virtual terminals of Kramer can. Thus, the proposed combination of Kramer and Nair is non-operative and fails to provide each of the claimed elements.

Claim 13 is drawn to a method for transmitting credit transaction data over a communications medium comprising: receiving credit transaction data from two or more point of sale devices, each reading credit card data from a magnetic stripe of a credit card; determining a point-of-sale device data transmission protocol to use to assemble the credit transaction data into an authorization request; encrypting the authorization request; transmitting the encrypted authorization request over the communications medium; decrypting the encrypted authorization request; determining which of two or more authorization systems is the appropriate authorization system to provide the authorization request to; and transmitting the authorization request to the appropriate authorization system. All of these elements are missing and cannot be provided by the suggested combination. As noted, Nair only discloses one point of sale device, and any point-of-sale device data transmission protocol to use to assemble the credit transaction data into an authorization request would be determined by that point of sale device. Again, to combine the functionality of Kramer with Nair, it would be necessary to distribute centralized functionality from the gateway terminal of Kramer to the multi-reader terminal of Nair. There is simply no teaching on how to do this – how would the gateway of Kramer be able to interface with the multi-terminal reader, which can only receive downloads, but which cannot perform the functions of the virtual terminals of Kramer? Furthermore, the multi-reader terminal of Nair is incapable of determining a point-of-sale device data transmission protocol to use to assemble the credit transaction data into an authorization request; encrypting the authorization request; transmitting the encrypted authorization request over the communications medium, when there can be two or more different point of sale terminals. Even with a single point of sale terminal, it would only route any data received from the point of sale terminal, and is not able to assemble an authorization request, much less encrypt the authorization request. Such authorization requests must be in a terminal-specific format, so the multi-reader terminal of Nair would need to be able to communicate with the point of sale terminal, not simply route data to and from it. As has been

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amply described, the combination of Nair and Kramer simply doesn't work – it doesn't teach how to turn a multi-reader system into a virtual terminal.

Claim 14 depends from claim 13 and includes that receiving the credit transaction data from the point of sale device comprises receiving the credit transaction data in accordance with one or more of an ISO 8583 protocol or a Visa-K protocol. These are data transmission protocols – the multi-reader terminal of Nair simply forwards data in these formats that is received from a point of sale terminal on without performing any processing of the data. How would the multi-reader terminal of Nair be enabled to perform the functions of the merchant website and virtual terminal? Clearly, it cannot.

Claim 15 includes the method of claim 13 wherein encrypting the authorization request comprises encrypting the credit transaction data using an encryption module received from a hub manager. Such encryption would be performed by Nair, if at all, by someone access the point of sale system. Assuming, *arguendo*, that the gateway of Kramer performs this function with the virtual terminals operating on the merchant websites, a multi-reader system is a simple device, and cannot perform the functions of a merchant website. The multi-reader terminal of Nair simply cannot do anything other than route data from a point of sale terminal.

Claim 16 includes the method of claim 13 wherein transmitting the encrypted authorization request over the communications medium comprises transmitting the encrypted data in an HTTP format. Again, the multi-reader terminal of Nair lacks this capacity, as well as the ability to encrypt and to generate an authorization request.

Claim 18 includes the method of claim 17 wherein performing the control function at the remote hub in response to the control message comprises transmitting status data for the remote hub. The multi-reader terminal of Nair can do – it can generate status data, but it cannot do so in response to a control message. In order to do so, it would require the greater computing power of a merchant web site, as demonstrated by Kramer. While this greater computing power at the remote location is disclosed in the pending application, the simple CPU 1005 of Nair can only run programs that are downloaded from a remote location, and cannot respond to control functions from the remote location.

Claim 19 includes the method of claim 17 wherein performing the control function at the remote hub in response to the control message comprises transmitting status data for one or more

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point of sale devices connected to the remote hub. Again, this claim highlights the shortcomings of the prior art – no interaction with the point of sale device connected to the multi-reader system is taught by Nair, because of the limited processing capability of the multi-reader system. In order to be able to transmit status data for one or more point of sale devices connected to the multi-reader system, the multi-reader system would need to have system that can communicate with the point of sale devices. Instead, Nair teaches that the multi-reader system can only route data. It is not possible to perform the functions of the merchant website of Kramer using the multi-reader system of Nair.

Claim 20 includes the method of claim 17 wherein performing the control function at the remote hub in response to the control message comprises updating the remote hub with a protocol module to accommodate a new point of sale device. Kramer teaches only virtual, not physical, point of sale devices, and the multi-reader system of Nair is unable to do anything other than route data from point of sale devices. There is no protocol needed – only format data to recognize when a message should be routed to a point of sale device.

Claim 21 includes the method of claim 17 wherein performing the control function at the remote hub in response to the control message comprises updating the remote hub with an encryption module. As described, the multi-reader system of Nair does not perform encryption.

Claim 22 includes a system for transmitting credit transaction data comprising: two or more point-of-sale systems, each point-of-sale system using a proprietary data format to read credit card data from a magnetic stripe of a credit card and generate credit transaction data; a remote hub system coupled to a communications medium, the remote hub system receiving the credit transaction data from one or more point of sale systems, translating the credit transaction data from the proprietary data format to a predetermined data format, encrypting the translated credit transaction data, and transmitting the translated encrypted credit transaction data over the communications medium; and a gateway system coupled to the communications medium, the gateway system receiving the encrypted translated credit transaction data, decrypting the encrypted translated credit transaction data, and transmitting the translated credit transaction data to are authorization system. As previously described, the multi-reader system of Nair lacks the processing power to perform these functions, which it is assumed, *arguendo*, the merchant web site of Kramer can perform.



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Claim 23 depends from claim 22 and further comprises a first authorization system coupled to the gateway system; a second authorization system coupled to the gateway system; and wherein the gateway system transmits the credit transaction data to the first or second authorization system based upon the translated credit transaction data. Again, assuming, *arguendo*, that the merchant web site of Kramer can perform these tasks, the multi-reader system of Nair cannot.

Claim 24 depends from claim 22 and includes that the remote hub system further comprises a protocol translator receiving the credit transaction data from each of the one or more point of sale systems according to the proprietary data format associated with each point of sale system. Claim 25 depends from claim 22 and includes that the remote hub system further comprises an update system receiving an encryption update and installing the encryption update on the remote hub system. Claim 26 depends from claim 22 and includes that the remote hub system further comprises an update system receiving an encryption update and installing the encryption update on one or more of the point-of-sale systems. The multi-reader system of Nair does not translate protocols or encrypt, and would not be able to based on the limited processing power.

Claim 27 depends from claim 22 and includes that the point-of-sale systems include one or more pre-existing point of sale systems that are configured to communicate using a public switched telephone network telephone line. Nair only discloses in Fig. 5C a point of sale terminal that connects to an ISP – the system of Nair would not be able to accommodate point of sale systems that are configured to communicate using a public switched telephone network telephone line, and Kramer is only used with virtual point of sale systems.

Claim 28 depends from claim 27 and includes a telephone backup system coupled to one or more of the point of sale systems and the hub, wherein the hub uses the telephone backup system when the communications medium is unavailable. The virtual point of sale terminals of Kramer are not the point of sale systems of Nair – in order to combine Nair and Kramer as suggested by the examiner, it would be necessary to replace the point of sale terminals of Nair with web servers! Furthermore, as previously noted and as was acknowledged by the PTO by the withdrawal of the claim rejections under 35 USC 102 over Kramer, virtual point of sale terminals do not read credit card data from a magnetic stripe.

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Applicants have now, for the fourth time, traversed the rejections of the claims, and request that this unfair, expensive, and time-wasting process of rejecting claims over art that clearly does not anticipate the claimed invention be stopped, and that these claims be allowed to issue. In two years and under two Examiners, the PTO has been unable to find art that anticipates these claims – it is improper to continue to cite new art against them or to refuse to withdraw the rejections and force an appeal.

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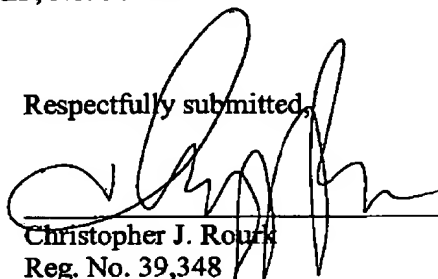
### CONCLUSION

In view of the foregoing remarks and for various other reasons readily apparent, Applicant submits that all of the claims now present are allowable, and withdrawal of the rejection and a Notice of Allowance are courteously solicited.

If any impediment to the allowance of the claims remains after consideration of this amendment, a telephone interview with the Examiner is hereby requested by the undersigned at (214) 939-8657 so that such issues may be resolved as expeditiously as possible.

No fee is believed to be due at this time. However, if any applicable fee or refund has been overlooked, the Commissioner is hereby authorized to charge any fee or credit any refund to the deposit account of Godwin Gruber LLP, No. 500530.

Respectfully submitted,



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